The Air Compliance Advisor

Free Computer-Based Tool for Developing Air Pollution Compliance Strategies US Air Force Research Laboratory (AFRL/MLQ), Tyndall AFB, Florida

The Need:

Day-to-day activities at both industrial and DoD facilities require the operation of a wide variety of air pollution sources. In the US, the passage of the 1990 Clean Air Act Amendments (CAAA) made maintaining regulatory compliance a complicated task for Environmental Coordinators (ECs) at these facilities.

To develop a cost-effective compliance strategy, ECs must consider many issues: source characterization; control device selection: pollution prevention regulatory strategies; requirements at the federal, state, and local levels; and permit conditions. The Air Compliance Advisor (ACA) provides the user-friendly tools needed to tackle these daunting tasks.

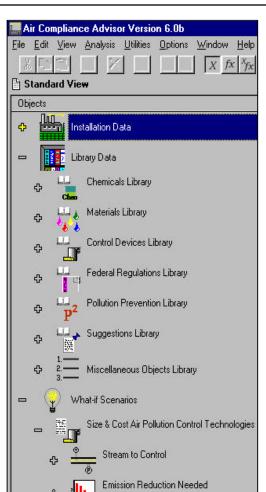
The Solution

The ACA is a free software package that contains the data structure and tools needed to perform many types of air quality

analysis. Its flexible design accommodates a wide variety of end-users through built-in modes (selectable by the user) for novice, intermediate, and expert users. It deftly manages the complicated data structure inherent to air pollution problems; accommodates rapid program development with built-in error checking; and allows flexible data entry and customization to local needs and requirements.

To run the ACA effectively, users should minimally have:

- IBM PC or compatible computer
- 16 MB of RAM
- 12 MB of free hard drive space
- 486 type processor
- VGA monitor
- Mouse supported by MS Windows 95 or NT
- Microsoft Windows 95, or MS Windows NT version 3.51 or later



What Can the ACA Do?

- Serve as a database for all air pollution related information, including air emission inventories
- Size control devices and estimate their costs
- Check for applicable federal regulations (NESHAPS, NSPS, & MACT)
- Calculate actual and potential emissions
- Estimate emission rates for many DoD source categories using AP-42 emission factors
- Suggest alternative compliance strategies
- Allow the end-user to extend the software to solve non-standard problems
- Allow EC to run "what-if" scenarios with data to evaluate compliance options
- Provide results for available options in a manner the EC can easily understand

The Future of the ACA

The Air Compliance Advisor has been approved and adopted by the US EPA's

Office of Air Quality Planning and Standards' (OAQPS) Innovative Strategies and Economics Group (ISEG). They will continue to develop and support the ACA.

The ACA is also being upgraded to easily support interfaces with other air emission inventory systems, including the Air Force's COMMAND CORE APIMS module.

Where to Get the ACA:

Version 6.0b of the ACA, along with a User Manual and other useful information, is currently available on the WWW at http://quattro.me.uiuc.edu/~acad.

Points of Contact:

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